

## ABSTRACT

Methods and systems for heat-treating a workpiece are disclosed. One such method involves pre-heating the workpiece to an intermediate temperature, heating a surface of the workpiece to a desired temperature greater than the intermediate temperature, and enhancing cooling of the workpiece. Enhancing cooling may involve absorbing radiation thermally emitted by the workpiece. Semiconductor heating methods and apparatuses are also disclosed. One such apparatus includes a first heating source for heating a first surface of a semiconductor wafer, a second heating source for heating a second surface of the semiconductor wafer, and a first cooled window disposed between the first heating source and the semiconductor wafer.